832 Dig. Serv. Br. Seaborne Comm.



805th Sig. Serv. Br. SIGSALY



AUSTRALIA ACAW ~



NEW GUINEA



THE

THINGS WE

SAVE

by George Sullivan

PHILIPPINES

MAY 1942

SAN FRANCISCO





I would like to dedicate this short history of where we have been to all the personnel of ACAN in Brisbane, Australia, and to Seaborne Communications in World War II.

George J. Sullivan December 1989



As the long-dreaded American invasion neared, Japanese housewives were drilled by the army in handling bamboo's spears. The samural code forbade surrender even in the face of inevitable defeat.

## ARMY COMMAND AND ADMINISTRATIVE NETWORK

## A C A N TO DESCRIPTION OF THE RESERVE OF THE RESERV

## Global Radio Network Brisbane, Australia

This is where we were! We'll start our story on the "DAY OF INFAMY', December 7, 1941.

The Signal Corp had a total of 3,000 officers (regular army and reserve) and approximately 47,000 enlisted men. Hardly enough to run a global war.

The concern at this point was to keep our sea lanes open to New Zealand and Australia. On March 10, 1942, Fort Shafter WTJ, Hawaii, established a manual CW radio circuit to a Royal Australian Air Force station in Melbourne, which served as U.S. Army Headquarters down under.

Hawaii WTJ heard Manila WTA for the last time (actually Bataan) at 07:01 Hawaiian time, April 4, 1942. Hawaii had established a radio circuit to Fort Mills (Corregidor), P.I. WVDM, April 3, 1942. Corregidor WVDM notified Hawaii, WTJ, that it had lost Bataan, WTA, April 9, 1942. Hawaii, WTJ, lost contact with Corregidor, WVDM, 18:07, May 5, 1942. (Note: May 6, P.I. Dateline, don't you know.)

All the above at the P.I. station was in the capable hands of Gen. Akin whom we all had contact with while carrying out our duties.

Hawaii, WTJ, then established radio circuit to Canton Island, WVHT, May 14,1942, followed in July 1942 links to Christmas Island WVHW, Suva WVHU, and Noumea, WVJN. These stations were on the perimeter of the sea lane we hoped to retain.

Gen. MacArthur and party arrived in Australia on March 17, 1942 out of Corregidor, and set up headquarters in Melbourne. The famous defense line to stop the Japanese invasion of Australia was planned, running through Brisbane Northeast and West.

Col. Calvert H. Arnold was theater Signal Officer as of Feb. 1, 1942. Mid March 1942, a lieutenant, Roger E. Dumas, with a team of 19 enlisted men, started to set up ACAN. They were from the 52nd Signal Service Batallion that had arrived in February of 1942.

The ACAN radio chart, dated May of 1942, shows the following stations:

Melbourne, WTJJ (RAAF), at Gen. Mac's headquarters.
Hawaii, WTJ, by way of Noumea, WVJN, to Darwin WVJK, to
Townesville, WVJL, and to Sydney, WVJM.

Melbourne, WTJJ, during its first week of operation and into

early May, handled the last flow of messages from the besieged Philippine Islands. Corregidor, WVDM, traffic went to Darwin, WVJK, to Melbourne, WTJJ, and Melbourne sends to Hawaii, WRJ, and on to the War Department in Washington. The load ran about 30,000 groups a day, both ways, and was transmitted on a duplex CW circuit. (sending via hand key or bug).

The tide changes! Up to this point, the Japs had not been stopped on any invasion that they had attempted. The Coral Sea battle May 7-8, 1942 accomplished this. The sea battle was considered a draw by both sides in ships lost. It wasn't until quite a while after the battle that we saw a plus for our side. The purpose of the Coral Sea drive by the Japs was to put its army ashore at Port Moresby, New Guinea. With his naval air cover gone, Vice Admiral Inouye ordered his invasion troups to turn back. This stopped the southern thrust of the Imperial Japanese Forces.

At this point, I will close the history books and tell you what I saw in June of 1942. Our ship landed June 18, 1942 (the "Tasker H. Bliss") at the Bulimba docks across from the shipyard where the OL boats would be worked on. March to the Ascot Racetrack, our first home. My outfit was the "Fixed Station Communication Co." consisting of 125 officers and enlisted men. Approximately 3 days later, part of the group was interviewed by Col. Arnold. I was one of the group to stay in Brisbane. The day I reported to the Somerville House radio room was around June 24, 1942. The room was located in the center of the school, over a patio. We could walk out of the radio room and sit on the patio roof and relax. The room had a 1 KW Federal Transmitter to Sydney, and a TG5 Telegraph set that the Telephone Co., patched to Townesville every morning at 7:00 a.m. to clear traffic. The two radio operators were from an Air Force bomber About two weeks later I was sent to Capalaba, the CW Radio receiving station, to open up our first circuit to San Francisco, WTO. The 1 KW Federal transmitter at Redland Bay was set up in a The circuit was established and sending with a hand key, the traffic started to flow to the War Department. Brisbane, WTO, was up and running! They handled between 80,000 - 100,000 groups a day with some messages via courier.

At this point, with the tide turned, Gen. MacArthur moved his headquarters to Brisbane. With this move, Brisbane became the nerve center of the Southwest Pacific. The circuits from Melbourne, Sydney, Townsville, Darwin, Noumea and Hawaii were now relocated to terminate in Brisbane. Great expansion ensued as American and Australian forces, reacting to earlier defeats, began to consolidate their strength and make their first victorious advances.

New equipment started to arrive. A 10-KW amplifier for the Brisbane-to-SanFrancisco circuit. Col. Calvert H. Arnold, July 1942 became the Signal Officer of the U.S. Army of Supplies in the SOWP area (USA-SOS-SWP). Col.John C. Grable became Arnold's executive Signal Officer.

To give you an example of how temperamental the hotshot operators in San Francisco were, they refused to copy hand sent messages from Noumea. This traffic was routed through Brisbane. In the early months of 1942, from June on, San Francisco operators complained about Brisbane on the same score. The operators in Brisbane begged, borrowed and stole equipment to see if they could send messages via machines. The supply problem was deplorable. You had to patch, repair, and say a prayer. After much letter writing, Col. Grable obtained a Boehme high speed CW system for the Brisbane-San Francisco circuit.

Boehme equipment! What is that? The operator in Brisbane would put his message via punched holes on a paper tape, insert it in a sending head (variable speed) to key the transmitter in Redland Bay. On a dry day, the open wire telephone lines to Redland Bay 30 miles away, would allow the speed to go up to 100 words per minute, much faster than if sent manually, by hand. This moved a greater amount of traffic and made the operators in San Francisco very happy. On the receiving end in Capalaba, we had 3 receivers tuned to San Francisco. Receiver #1 on the San Francisco Rombic antenna. Receiver #2 on Hawaii Rombic antenna. Receiver #3 changed from various other antennae to get best signal. The output of the three receivers went into a 3-channel device which selected the strongest signal of the three, and re-keyed an audio oscillator which was sent over the telephone lines to ink a tape at the operating room in Brisbane. A very efficient CW system! In late 1942 a most important circuit was added from Brisbane to Port Moresby, New Guinea, WVLQ.

As the year 1942 wound down and 1943 came into sight, the supply problem improved. We could order dry "B" batteries for our test gear and receive the complete order.

The first of the year, Capalaba was handed a new assignment. We had to set up several receivers on assigned frequencies and log the signal strength every quarter hour, 24 hours a day. This went on for several weeks. One of the frequencies was entertaining - Radio Tokyo. We heard the latest American music releases, plus "Tokyo Rose," but that's another story. The gang was trying to figure out what the monitoring was all about. We received our answer in February of '43 when the 40-KW Single Side Band unit went into service, closing down the high speed CW Boehme circuit between Capalaba and San Francisco.

Our most industrial and scientific community, having over a year since the war started, was producing new state of the art equipment. The single side band system employed three teletype machines on diversity, to help correct "fade" or "message dropout." For example, the teletypes could be on the lower side band with the upper side band being used for voice control between Brisbane and San Francisco, or SIGSALY (Green Hornet), located at Gen. MacArthur's headquarters,

or for use by the Photo Group. The system handled 250,000 message groups a day, 80-85% administrative. A vast improvement over the high speed Boehme circuit. Progress -that's what it was! Messages were also mechanically encoded and decoded.

Around the 1st of November, 1943, the 805th Signal Service Bn., set up a telephone voice scrambling circuit at Gen. MacArthur's HQ, known as SIGSALY (Green Hornet). This highly classified method was super hush-hush, and not declassified until around 1976.

Here is an interesting excerpt from "General Kenney Reports" by Geo. C. Kenney, 1949.

"On the 9th of November, 1943, a direct telephone line between Brisbane and Washington was inaugurated. General Barney Giles, Arnold's Chief of Staff, talked with me for a few minutes and mentioned that my son, Bill, who had recently graduated from Officers Candidate School and been given commission as Second Lieutenant in the Air Corps, was on his way to the Pacific. I told him not to send Bill to me as it would not be fair to either of us. I said to send him to the Thirteenth Air Force and let him work for General Miff Harmon. Barney said he would fix the orders up and then he put Alice Kenney, my wife, on the line. The connection was not too good, and I had trouble understanding her excited soprano voice, but we both got quite a kick out of the conversation. Arnold had very thoughtfully brought her in for the occasion, warning her that the very existence of the newly opened line was a deep military secret. She told me afterward that she was so impressed she didn't dare mention it even in her diary."

The Radio Photo Group entered the picture about this time.

They had got rid of the slow, old-fashioned CW (dit-dah) system on ACAN. Teletype was really clearing the traffic and now they had a telephone system that they could use. The Photo Service helped Washington, but I don't believe it had much use into the battle zone.

The efficient global ACAN system could put a commercial enterprise to shame. GHQ's satisfaction was reflected in the commendations issued to all involved.

For what it's worth, there were 3 different radio rooms located in the Somerville House. The first one that I reported to was in the center of the complex on the second floor, over a patio.

The second room was located in the extreme right wing near Vulture Street, on the top floor where the first CW circuit to San Francisco was inaugurated.

The third location was in the extreme right wing, first floor

towards the back of the building, where the single side band control room and operators were.

The time had arrived to start an all out push toward Japan. Gen. MacArthur would proceed up through the Island of New Guinea, the Philippine Islands, to Japan. The Navy from Hawaii would strike in the central Pacific toward Japan.

Gen. Akin, like Gen. Kenney, had been given a free hand to run their organizations. They must, however, keep Gen. MacArthur informed and any major decisions would have to have his approval.

There were many beach landings to be made, and the Signal Corp., was to play a big part in them.

In the spring of 1944, Seaborne Communications was born, but was not officially authorized before January of 1945. In the post years of the war, many vessels of various types were pressed into service, such as the FP47 Communication Boat.

The immediate plan was to have invasion vessels and floating ACAN stations on the spot right after a landing was secured. At this point in time a GHQ major radio communication station, so close to the action, was unheard of. Gen Akin obtained three ships to be under Army control - NOT Navy - but manned by the Navy. These three ships would be outfitted for the invasion of Leyte in the Philippines all equipped with Army Signal Corp units. The PCE(R)848 went into the invasion with Gen.Akin aboard. PCE(R)849 was backup for PCE(R)848 and had Gen. Akin's deputy aboard. PCE(R)850 had the 6th Army Signal Corp aboard.

When Gen. MacArthur landed in Australia, he made a promise to the people of the Philippines, "I shall return". He specified that he wanted a radio broadcast ship in the convoy so that when he stepped ashore in the Philippines - which was 3 hours after the invasion started - he could broadcast that message to the people. It was also going to be used to broadcast to the guerrillas, plus press service to the world. For this, the 50-year-old schooner, "APACHE" which had many uses, but was formerly Pres. McKinley's yacht, was acquired. The yacht was outfitted in Sydney, Australia with necessary gear. The good old faithful COMM. FP47 was its backup. I have two articles on the "APACHE" on hand. "THOSE SINGING MASTS" (QST, Sept. 1945) and "THE SHIP WITH THE SINGING MASTS". (SATURDAY EVENING POST, MAY 12, 1945)

Three LCM's furnished by the Navy had mobile communications equipment aboard to establish land terminals.

For the construction of the floating ACAN stations, 7 ocean lighters (OL's) were ordered from a Sydney, Australia shippard. They were 120' long with a 24' beam. The original plan called for 3 ACAN stations, using 6 of the OL's. The 7th, OL31, was to be equipped

with a SIGSALY terminal. The first station consisted of OL22 receiver and OL30 transmitter.

Approximately seventy-five Army personnel were transferred to Seaborne to accomplish the task. In October of 1944, the OL22 and OL3O proceded to Hollandia, Dutch New Guinea, and set in and handled traffic there for a few months, then moved on to Manila Bay in the Philippines. In early June of 1945, OL23 receiver and OL29 transmitter arrived. I have not located any information on the other two OL's. It's a possibility that they became Signal Corp supply and repair boats. That is a wild guess.

When Seaborne entered Manila Harbor, they were dubbed, "Gen. Akin's Grand Fleet."

As I left for home in June of 1945, that ended my bird's-eye view of where we had been. I do know 7 OL's were towed to Japan. I don't know what happened to the "Weeroona". I am in the process of checking on this.

If, after reading this, will some of you who went on to Japan, send me a fill-in which will be distributed to all with recognition to the author?

What was in store for you if the invasion of Japan had to be carried out? Operation "Olympic" invasion of the Islands of Kyushu, Japan on November 1, 1945, followed by Operation Coronet, Japan's mainland of Honshu, and the Tokyo planes on March 1, 1946.

To find out what an awesome task faced you, combatwise, plus what damage would have been sustained to the invasion fleet at Okinawa when on October 9, 1945, an out-of-season devastating typhoon struck that area, above can be found in a pamphlet, 'TOP SECRET', by James Martin Davis, Ranger Publication.

During the war I could not rationalize the attack on the U.S. by the Japanese. Since then I have run across two interesting items. When the Japanese War Cabinet held their meeting to decide whether or not to attack Hawaii, the attack fleet was already under way, listening for the word to either attack or turn back. Adm. Isoroku Yamamoto was asked his opinion on the advisability of attacking. He had studied at Harvard and had been a high level Military Aide in this country, so knew our makeup. His reply was, "IF you can win the war in one year, attack. When you awaken the sleeping giant, you are going to have your hands full."

The Cabinet decided to attack, so out went the secret code word to the attack fleet.

The second item I read just recently was very enlightening. An American officer who was a prisoner of war of the Japanese, was

called in to the headquarters of a high level officer of the camp, and was invited to sit down. A friendly discussion ensued, unlike the normal procedure where everybody was called to formation in the hot sun and stood at attention for hours and suffered beatings as the officers walked behind the ranks. The Japanese officer proceded to explain why Japan had attacked the U.S. The Japanese population was bulging at the seams, plus they needed materials such as petroleum and minerals. They had always considered the Asiatic area to belong to them and not the "Westerners." They figured that America was so busy, knowing that it would soon have to enter the conflict in Europe, that they would agree with the Japanese theory and let them have Asia. This has satisfied my question that remained unanswered for so many years.

As we meet and talk with reunion members, and in finding new members, we are able to get a better insight into this whole ball of wax. So don't be surprised if down the road you see an update on the above.

George J. Sullivan